# Commonwealth of Kentucky Division for Air Quality

# PERMIT APPLICATION SUMMARY FORM

Completed by: Luis D. Fuentes

GENERAL INFORMATION:	
Name:	Dow Corning Corporation
Address:	4770 US 42 E
	Carrolton, Kentucky 41008
Date application received:	5/5/2004
SIC Code/SIC description:	2869, Industrial Organic Chemicals, Not Elsewhere
	Classified
Source ID:	21-041-00004
Source A.I. #:	703
Activity ID:	APE20040003
Permit:	V-07-005
APPLICATION TYPE/PERMIT ACTIVITY:	
[ ] Initial issuance	[ ] General permit
[X] Permit modification	[ ] Conditional major
Administrative	[X] Title V
$\overline{X}$ Minor	Synthetic minor
$\frac{\overline{X}}{X}$ Significant	[X] Operating
[X] Permit renewal	[ ] Construction/operating
COMPLIANCE SUMMARY:	
[ ] Source is out of compliance [X] Compliance certification sig	[ ] Compliance schedule included ned
APPLICABLE REQUIREMENTS LIST:	
·	NSPS [X] SIP
	NESHAPS [ ] Other
2 3	Not major modification per 401 KAR 51:001, 1(116)(b)
MISCELLANEOUS:	
[ ] Acid rain source	
[ ] Source subject to 112(r)	
[ ] Source applied for federally	enforceable emissions cap
[ ] Source provided terms for all	ternative operating scenarios
[X] Source subject to a MACT:	
[ ] Source requested case-by-case	se 112(g) or (j) determination
[ ] Application proposes new co	<del></del>
[X] Certified by responsible offi	
[X] Diagrams or drawings include	
	ation (CBI) submitted in application
[ ] Pollution Prevention Measur	
[ ] Area is non-attainment (list p	pollutants):

#### **EMISSIONS SUMMARY:**

Pollutant	Actual (tpy)	Potential (tpy)
$PM/PM_{10}$	0.032	28.2
$\mathrm{SO}_2$	0.11	654.6
NOx	0.39	223
СО	0.31	156.7
VOC	0.02	2670
Single HAPs (HCL)	0.0026	49.7
Single HAPs (Methanol)	-	40.9
Source wide HAPs	-	2373.6

#### **SOURCE DESCRIPTION:**

Dow Corning Corporation is a synthetic organic chemical manufacturing industry (SOCMI) falling under SIC code Group 28. The primary operation at the Carrollton plant consists of the manufacturing of silicone-based compounds. The primary raw materials at the plant are silicon, methanol, hydrochloric acid, and methyl chloride. The methanol and hydrochloric acid are combined to produce methyl chloride, which is then reacted with the silicon metal to produce various silicone-based chemicals.

The plant also includes several support activities such as Utilities, Waste Treatment, Quality Assurance Laboratories, Barge Unloading, Product Shipping and Research & Development (labs and pilot plants).

## **EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

None.

### **OPERATIONAL FLEXIBILITY:**

None